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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
 NEWS 2 Apr 08 "Ask CAS" for self-help around the clock
 NEWS 3 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area
 NEWS 4 Apr 09 ZDB will be removed from STN
 NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
 NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
 NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER
 NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
 NEWS 9 Jun 03 New e-mail delivery for search results now available
 NEWS 10 Jun 10 MEDLINE Reload
 NEWS 11 Jun 10 PCTFULL has been reloaded
 NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
 NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
 saved answer sets no longer valid
 NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY
 NEWS 15 Jul 30 NETFIRST to be removed from STN
 NEWS 16 Aug 08 CANCERLIT reload
 NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
 NEWS 18 Aug 08 NTIS has been reloaded and enhanced
 NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
 now available on STN
 NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
 NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
 NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
 NEWS 23 Sep 03 JAPIO has been reloaded and enhanced

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
 CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
 AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002

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 NEWS INTER General Internet Information
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 NEWS WWW CAS World Wide Web Site (general information)

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* * * * * STN Columbus * * * * *

=> fil reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:22:45 ON 09 SEP 2002
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STRUCTURE FILE UPDATES: 6 SEP 2002 HIGHEST RN 447682-31-7
 DICTIONARY FILE UPDATES: 6 SEP 2002 HIGHEST RN 447682-31-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
 for more information. See STNote 27, Searching Properties in the CAS
 Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e pseudomanas

E1	1	PSEUDOMALACHITE/BI
E2	105	PSEUDOMALLEI/BI
E3	2 -->	PSEUDOMANAS/BI
E4	1	PSEUDOMANIBACANINE/BI
E5	1	PSEUDOMECONIN/BI
E6	2	PSEUDOMENOPON/BI
E7	5	PSEUDOMERU/BI
E8	5	PSEUDOMERUCATH/BI
E9	2	PSEUDOMERUCATHIN/BI
E10	5	PSEUDOMERUCATHINE/BI
E11	3	PSEUDOMESENTEROIDES/BI
E12	1	PSEUDOMESON/BI

=> s e3

L1 2 PSEUDOMANAS/BI

=> e streptococcus

E1	1	STREPTOCOCCI/BI
E2	8	STREPTOCOCCIN/BI
E3	38201 -->	STREPTOCOCCUS/BI
E4	1	STREPTOCOM/BI
E5	1	STREPTOCYANIN/BI
E6	1	STREPTOCYANINE/BI
E7	1	STREPTOCYCLIN/BI
E8	3	STREPTOCYCLINE/BI
E9	2	STREPTOCYMES/BI
E10	1	STREPTODECA/BI
E11	1	STREPTODECASE/BI
E12	4	STREPTODORN/BI

=> s e3

L2 38201 STREPTOCOCCUS/BI

=> e streptococcus/cn

E1	1	STREPTOCOCCIN A-M49 (STREPTOCOCCUS PYOGENES STRAIN GT9538 GE NE SCNA'' PRECURSOR)/CN
E2	1	STREPTOCOCCIN SAL-P/CN

```

E3      0 --> STREPTOCOCCUS/CN
E4      1      STREPTOCOCCUS AGALACTIAE/CN
E5      1      STREPTOCOCCUS CREMORIS SERINE PROTEINASE/CN
E6      1      STREPTOCOCCUS DIACETILACTIS NEUTRAL PROTEINASE/CN
E7      1      STREPTOCOCCUS DIACETILACTIS, CULTURE DISTILLATE FLAVORING/CN
E8      1      STREPTOCOCCUS EQUISIMILIS/CN
E9      1      STREPTOCOCCUS FAECIENS/CN
E10     1      STREPTOCOCCUS FAECIUM/CN
E11     1      STREPTOCOCCUS LACTIS ACID PROTEINASE/CN
E12     1      STREPTOCOCCUS LACTIS PROTEINASE/CN

```

=> e staphylococcus

```

E1      6      STAPHYLOCOCCUS/BI
E2     16      STAPHYLOCOCCIN/BI
E3    25045 --> STAPHYLOCOCCUS/BI
E4      3      STAPHYLOCYSTIS/BI
E5      2      STAPHYLOFERRI/BI
E6      2      STAPHYLOFERRIN/BI
E7     38      STAPHYLOID/BI
E8     45      STAPHYLOKINASE/BI
E9     12      STAPHYLOL/BI
E10     2      STAPHYLOLYSIN/BI
E11    10      STAPHYLOLYTICUS/BI
E12    11      STAPHYLOMYCIN/BI

```

=> s e3

```

L3      25045 STAPHYLOCOCCUS/BI

```

=> e clostridium

```

E1      2      CLOSTRIDIOPEPTID/BI
E2      2      CLOSTRIDIOPEPTIDASE/BI
E3     9155 --> CLOSTRIDIUM/BI
E4      1      CLOSTRIDIUMB24/BI
E5      1      CLOSTRIDIUMB33/BI
E6      1      CLOSTRIDIUMB40/BI
E7      3      CLOSTRIDUM/BI
E8     10      CLOSTRIPAIN/BI
E9      2      CLOSULAM/BI
E10     1      CLOSURE/BI
E11     1      CLOSYL/BI
E12     1      CLOSYLATE/BI

```

=> s e3

```

L4      9155 CLOSTRIDIUM/BI

```

=> fil .search

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	16.76	16.97

FILE 'MEDLINE' ENTERED AT 14:23:55 ON 09 SEP 2002

FILE 'CAPLUS' ENTERED AT 14:23:55 ON 09 SEP 2002

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=> d his

(FILE 'HOME' ENTERED AT 14:22:38 ON 09 SEP 2002)

FILE 'REGISTRY' ENTERED AT 14:22:45 ON 09 SEP 2002

```

      E PSEUDOMANAS
L1      2 S E3
      E STREPTOCOCCUS
L2      38201 S E3
      E STREPTOCOCCUS/CN
      E STAPHYLOCOCCUS
L3      25045 S E3
      E CLOSTRIDIUM
L4      9155 S E3
  
```

FILE 'MEDLINE, CAPLUS, BIOSIS, USPATFULL, EMBASE' ENTERED AT 14:23:55 ON 09 SEP 2002

=> s l1 or l2 or l3 or l4

TOO MANY TERMS FOR FILE CROSSOVER IN L2

There are limits on the size of an answer set being crossed over from one file to another. Enter HELP CROSSOVER at an arrow prompt (=>) for specific information.

=> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.93	20.90

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<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e hemophilus influenza

```

E1      5      HEMOPHILIC/BI
E2      18     HEMOPHILUS/BI
E3      0 --> HEMOPHILUS INFLUENZA/BI
E4      2      HEMOPHORE/BI
E5      1      HEMOPLAST/BI
E6      1      HEMOPLEX/BI
E7      3216   HEMOPOIETIC/BI
E8      103    HEMOPOIETIN/BI
E9      2      HEMOPOIETINS/BI
E10     1      HEMOPR/BI
  
```

```

E11      1      HEMOPRENE/BI
E12      5      HEMOPROTECTOR/BI

```

```
=> s e2
```

```
L5      18 HEMOPHILUS/BI
```

```
=> e streptococcus pneumoniae
```

```

E1      8      STREPTOCOCCIN/BI
E2      38201   STREPTOCOCCUS/BI
E3      0 --> STREPTOCOCUS PNEUMONIAE/BI
E4      1      STREPTOCOM/BI
E5      1      STREPTOCYANIN/BI
E6      1      STREPTOCYANINE/BI
E7      1      STREPTOCYCLIN/BI
E8      3      STREPTOCYCLINE/BI
E9      2      STREPTOCYMES/BI
E10     1      STREPTODECA/BI
E11     1      STREPTODECASE/BI
E12     4      STREPTODORN/BI

```

```
=> e streptococcus?
```

```

E1      8      STREPTOCOCCIN/BI
E2      38201   STREPTOCOCCUS/BI
E3      0 --> STREPTOCOCUS?/BI
E4      1      STREPTOCOM/BI
E5      1      STREPTOCYANIN/BI
E6      1      STREPTOCYANINE/BI
E7      1      STREPTOCYCLIN/BI
E8      3      STREPTOCYCLINE/BI
E9      2      STREPTOCYMES/BI
E10     1      STREPTODECA/BI
E11     1      STREPTODECASE/BI
E12     4      STREPTODORN/BI

```

```
=> e streptococcuspneu?
```

```

E1      8      STREPTOCOCCIN/BI
E2      38201   STREPTOCOCCUS/BI
E3      0 --> STREPTOCOCUSPNEU?/BI
E4      1      STREPTOCOM/BI
E5      1      STREPTOCYANIN/BI
E6      1      STREPTOCYANINE/BI
E7      1      STREPTOCYCLIN/BI
E8      3      STREPTOCYCLINE/BI
E9      2      STREPTOCYMES/BI
E10     1      STREPTODECA/BI
E11     1      STREPTODECASE/BI
E12     4      STREPTODORN/BI

```

```
=> e streptococcus pneu?
```

```

E1      8      STREPTOCOCCIN/BI
E2      38201   STREPTOCOCCUS/BI
E3      0 --> STREPTOCOCUS PNEU?/BI
E4      1      STREPTOCOM/BI
E5      1      STREPTOCYANIN/BI
E6      1      STREPTOCYANINE/BI
E7      1      STREPTOCYCLIN/BI
E8      3      STREPTOCYCLINE/BI
E9      2      STREPTOCYMES/BI
E10     1      STREPTODECA/BI
E11     1      STREPTODECASE/BI
E12     4      STREPTODORN/BI

```

```
=> e pneumoniae
```

E1	2	PNEUMONANTHOSIDE/BI
E2	80	PNEUMONIA/BI
E3	20452 -->	PNEUMONIAE/BI
E4	475	PNEUMOPHILA/BI
E5	18	PNEUMOPHILIA/BI
E6	3	PNEUMORA/BI
E7	4	PNEUMOS/BI
E8	4	PNEUMOSAMINE/BI
E9	2	PNEUMOTROPICA/BI
E10	99	PNEUMOVIRUS/BI
E11	1	PNEUMOXIDE/BI
E12	62	PNEUSTES/BI

=> s e3

L6 20452 PNEUMONIAE/BI

=> s l6 and l2

MISSING OPERATOR

=> s l6 and l2

L7 12092 L6 AND L2

=> e fasciae

E1	168	FASCI/BI
E2	3	FASCIA/BI
E3	0 -->	FASCIAE/BI
E4	31	FASCIANS/BI
E5	96	FASCIATA/BI
E6	1	FASCIATA3/BI
E7	1	FASCIATA4/BI
E8	1	FASCIATA5/BI
E9	1	FASCIATIN/BI
E10	1	FASCIATO/BI
E11	1	FASCIATOXIN/BI
E12	9	FASCIATUM/BI

=> s e2

L8 3 FASCIA/BI

=> s l8 and l2

L9 0 L8 AND L2

=> e listeria

E1	6	LISTERA/BI
E2	13	LISTERI/BI
E3	10507 -->	LISTERIA/BI
E4	1	LISTERIAL/BI
E5	2	LISTERINE/BI
E6	1	LISTERIOCIN/BI
E7	10	LISTERIOLO/BI
E8	9	LISTERIOLYSIN/BI
E9	3	LISTERIOLYSINS/BI
E10	1	LISTERITE/BI
E11	3	LISTEROL/BI
E12	2	LISTEROLYSIN/BI

=> s e3

L10 10507 LISTERIA/BI

=> e salmonella

E1	5	SALMONASE/BI
E2	14768	SALMONE/BI
E3	14766 -->	SALMONELLA/BI

E4	1	SALMONEUM/BI
E5	22	SALMONIC/BI
E6	115	SALMONICIDA/BI
E7	22	SALMONICOL/BI
E8	22	SALMONICOLOR/BI
E9	6	SALMONID/BI
E10	47	SALMONINARUM/BI
E11	73	SALMONIS/BI
E12	1	SALMONNELLA/BI

=> s e3

L11 14766 SALMONELLA/BI

=> e ecoli

E1	1	ECOLAN/BI
E2	1	ECOLCRAFT/BI
E3	2 -->	ECOLI/BI
E4	1	ECOLID/BI
E5	1	ECOLIFE/BI
E6	3	ECOLINE/BI
E7	2	ECOLITE/BI
E8	1	ECOLL/BI
E9	1	ECOLL1/BI
E10	1	ECOLL10/BI
E11	1	ECOLL2/BI
E12	1	ECOLL3/BI

=> s e3

L12 2 ECOLI/BI

=> e campylobacter

E1	2	CAMPYLENCHIA/BI
E2	3	CAMPYLIUM/BI
E3	2847 -->	CAMPYLOBACTER/BI
E4	1	CAMPYLOCARPUM/BI
E5	6	CAMPYLOCENTRUS/BI
E6	26	CAMPYLOMORMYRUS/BI
E7	2	CAMPYLOPH/BI
E8	2	CAMPYLOPHYL/BI
E9	2	CAMPYLOPHYLLA/BI
E10	1	CAMPYLOPODUM/BI
E11	19	CAMPYLOPUS/BI
E12	1	CAMPYLOPUSAUR/BI

=> s e3

L13 2847 CAMPYLOBACTER/BI

=> e streptococcus(w) mutans

E1	8	STREPTOCOCCIN/BI
E2	38201	STREPTOCOCCUS/BI
E3	0 -->	STREPTOCOCCUS (W) MUTANS/BI
E4	1	STREPTOCOM/BI
E5	1	STREPTOCYANIN/BI
E6	1	STREPTOCYANINE/BI
E7	1	STREPTOCYCLIN/BI
E8	3	STREPTOCYCLINE/BI
E9	2	STREPTOCYMES/BI
E10	1	STREPTODECA/BI
E11	1	STREPTODECASE/BI
E12	4	STREPTODORN/BI

=> e mutans

E1	1	MUTANOL/BI
----	---	------------

```

E2          1      MUTANOLYSIN/BI
E3         430 --> MUTANS/BI
E4          1      MUTANSUCR/BI
E5          1      MUTANSUCRASE/BI
E6         4858     MUTANT/BI
E7          30     MUTANTS/BI
E8          16     MUTAROT/BI
E9          16     MUTAROTASE/BI
E10         1      MUTAS/BI
E11        1177     MUTASE/BI
E12         1      MUTASES/BI

```

=> s e3

```
L14          430 MUTANS/BI
```

=> s l2 and l14

```
L15          425 L2 AND L14
```

=> s mycobacterium

```

          12105 MYCOBACTERIUM
           2 MYCOBACTERIA
L16        12107 MYCOBACTERIUM
           (MYCOBACTERIUM OR MYCOBACTERIA)

```

=> fil .search

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	38.66	59.56

FILE 'MEDLINE' ENTERED AT 14:28:38 ON 09 SEP 2002

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=> d his

(FILE 'HOME' ENTERED AT 14:22:38 ON 09 SEP 2002)

FILE 'REGISTRY' ENTERED AT 14:22:45 ON 09 SEP 2002

```

          E PSEUDOMANAS
L1         2 S E3
          E STREPTOCOCCUS
L2        38201 S E3
          E STREPTOCOCCUS/CN
          E STAPHYLOCOCCUS
L3        25045 S E3
          E CLOSTRIDIUM
L4        9155 S E3

```

FILE 'MEDLINE, CAPLUS, BIOSIS, USPATFULL, EMBASE' ENTERED AT 14:23:55 ON 09 SEP 2002

FILE 'REGISTRY' ENTERED AT 14:24:14 ON 09 SEP 2002

```

      E HEMOPHILUS INFLUENZA
L5      18 S E2
      E STREPTOCOCUS PNEUMONIAE
      E STREPTOCOCUS?
      E STREPTOCOCUSPNEU?
      E STREPTOCOCUS PNEU?
      E PNEUMONIAE
L6      20452 S E3
L7      12092 S L6 AND L2
      E FASCIAE
L8      3 S E2
L9      0 S L8 AND L2
      E LISTERIA
L10     10507 S E3
      E SALMONELLA
L11     14766 S E3
      E ECOLI
L12     2 S E3
      E CAMPYLOBACTER
L13     2847 S E3
      E STREPTOCOCCUS (W) MUTANS
      E MUTANS
L14     430 S E3
L15     425 S L2 AND L14
L16     12107 S MYCOBACTERIUM

```

FILE 'MEDLINE, CAPLUS, BIOSIS, USPATFULL, EMBASE' ENTERED AT 14:28:38 ON 09 SEP 2002

=> s l1 or l3 or l4 or l5 or l6 or l7 or l8 or l9lr l10 or l11 or l12 or l13 or l14 or l15 or l16

MISSING OPERATOR L9LR L10

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s l1 or l3 or l4 or l5 or l6 or l7 or l8 or l9 or l10 or l11 or l12 or l13 or l14 or l15 or l16

TOO MANY TERMS FOR FILE CROSSOVER IN L3

There are limits on the size of an answer set being crossed over from one file to another. Enter HELP CROSSOVER at an arrow prompt (=>) for specific information.

=> s l1 or l4 or l5 or l6 or l7 or l8 or l9 or l10 or l11 or l12 or l13 or l14 or l15 or l16

TOO MANY TERMS FOR FILE CROSSOVER IN L6

There are limits on the size of an answer set being crossed over from one file to another. Enter HELP CROSSOVER at an arrow prompt (=>) for specific information.

=> s l1 or l4 or l5 or l7 or l8 or l9 or l10 or l11 or l12 or l13 or l14 or l15 or l16

TOO MANY TERMS FOR FILE CROSSOVER IN L7

There are limits on the size of an answer set being crossed over from one file to another. Enter HELP CROSSOVER at an arrow prompt (=>) for specific information.

=> s l1 or l4 or l5 or l8 or l9 or l10 or l11 or l12 or l13 or l14 or l15 or l16

TOO MANY TERMS FOR FILE CROSSOVER IN L10

There are limits on the size of an answer set being crossed over from one file to another. Enter HELP CROSSOVER at an arrow prompt (=>) for specific information.

=> s l1 or l4 or l5 or l8 or l9 or l11 or l12 or l13 or l14 or l15 or l16
TOO MANY TERMS FOR FILE CROSSOVER IN L11
There are limits on the size of an answer set being crossed over from
one file to another. Enter HELP CROSSOVER at an arrow prompt (=>)
for specific information.

=> s l1 or l4 or l5 or l8 or l9 or l12 or l13 or l14 or l15 or l16
TOO MANY TERMS FOR FILE CROSSOVER IN L16
There are limits on the size of an answer set being crossed over from
one file to another. Enter HELP CROSSOVER at an arrow prompt (=>)
for specific information.

=> s l1 or l4 or l5 or l8 or l9 or l12 or l13 or l14 or l15
1 FILES SEARCHED...
3 FILES SEARCHED...
4 FILES SEARCHED...
L17 25859 L1 OR L4 OR L5 OR L8 OR L9 OR L12 OR L13 OR L14 OR L15

=> s l17 and (lytic(w)enzyme? or lyze?)
L18 29 L17 AND (LYTIC(W) ENZYME? OR LYZE?)

=> s l18 and infection?
L19 4 L18 AND INFECTION?

=> dup rem l19
PROCESSING COMPLETED FOR L19
L20 4 DUP REM L19 (0 DUPLICATES REMOVED)

=> d ibib ab 1-
YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y

L20 ANSWER 1 OF 4 USPATFULL

ACCESSION NUMBER: 2002:21826 USPATFULL
 TITLE: Methods for introducing genes into mammalian subjects
 INVENTOR(S): Saito, Norimitsu, Kanagawa, JAPAN
 Zhao, Ming, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002012661	A1	20020131
APPLICATION INFO.:	US 2000-734786	A1	20001211 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-170166P	19991210 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Kate H. Murashige, Morrison & Foerster LLP, Suite 500, 3811 Valley Centre Drive, San Diego, CA, 92130-2332	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	742	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods to obtain genetic modifications of cells in histoculture are described. Modification is assisted by treating the histoculture with collagenase prior to contacting the histoculture with the delivery vehicle for the desired gene. Hair follicles and other organized

tissues can be modified in this way and then transplanted into intact recipients.

L20 ANSWER 2 OF 4 USPATFULL

ACCESSION NUMBER: 2002:9855 USPATFULL
 TITLE: Peptide-lipid conjugates, liposomes and liposomal drug delivery
 INVENTOR(S): Meers, Paul R., Princeton, NJ, United States
 Pak, Charles, Princeton, NJ, United States
 Ali, Shaikat, Monmouth Junction, NJ, United States
 Janoff, Andrew, Yardley, PA, United States
 Franklin, J. Craig, Skillman, NJ, United States
 Erukulla, Ravi K., Plainsboro, NJ, United States
 Cabral-Lilly, Donna, Princeton, NJ, United States
 Ahl, Patrick L., Princeton, NJ, United States
 Elan Pharmaceuticals Technologies, Inc., King of Prussia, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6339069	B1	20020115
APPLICATION INFO.:	US 1999-343650		19990629 (9)
RELATED APPL. INFO.:	Continuation-in-part of Ser. No. US 1998-168010, filed on 7 Oct 1998, now patented, Pat. No. US 6143716 Division of Ser. No. US 1997-950618, filed on 15 Oct 1997, now patented, Pat. No. US 6087325		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-27544P	19961015 (60)
	US 1997-39183P	19970227 (60)

DOCUMENT TYPE: Utility
 FILE SEGMENT: GRANTED
 PRIMARY EXAMINER: Nguyen, Dave T.
 LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis L.L.P.
 NUMBER OF CLAIMS: 22
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 38 Drawing Figure(s); 27 Drawing Page(s)
 LINE COUNT: 2321

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Peptide-lipid conjugates are incorporated into liposomes so as to selectively destabilize the liposomes in the vicinity of target peptidase-secreting cells, and hence, to deliver the liposomes to the vicinity of the target cells, or directly into the cells. The liposomes can thus be used to treat mammals for diseases, disorders or conditions,

e.g., tumors, microbial infection and inflammations, characterized by the occurrence of peptidase-secreting cells.

L20 ANSWER 3 OF 4 USPATFULL

ACCESSION NUMBER: 90:50741 USPATFULL
 TITLE: Methods for separating malignant cells from clinical specimens
 INVENTOR(S): Rotkman, M. Boris, Jamestown, RI, United States
 PATENT ASSIGNEE(S): Brown University Research Foundation, Providence, RI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4937187		19900626
APPLICATION INFO.:	US 1987-11219		19870205 (7)
RELATED APPL. INFO.:	Continuation-in-part of Ser. No. US 1984-623183, filed on 22 Jun 1984, now patented, Pat. No. US 4734372		

which is a continuation-in-part of Ser. No. US 1983-463669, filed on 4 Feb 1983, now patented, Pat. No. US 4559299

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Rosen, Sam
 LEGAL REPRESENTATIVE: Engellennner, Thomas J.
 NUMBER OF CLAIMS: 19
 EXEMPLARY CLAIM: 1
 LINE COUNT: 415

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fragments of a biopsy sample on the order of about 50 to 5000 cells are preferred for establishing viable tumor cell cultures for purposes such as establishing cell lines, chemotherapeutic assays and the like. Such fragments retain the three-dimensional cellular structure or organization of the original tumor and, therefore, can be cultured more readily. To obtain such fragments suitable for culturing, the biopsy sample can be enzymatically digested in a proteolytic or nucleolytic enzyme, such as collagenase, or by mechanical dissociation, or both where necessary. The fragments can then be suspended in an aqueous medium so that non-aggregated cells (e.g., red blood cells,

lymphocytes, macrophages) and cellular debris will form a supernatant while the remaining fragments containing aggregated tumor cells are deposited in

a sediment layer. Preferably, the medium is an isotonic tissue culture medium and decantation is conducted at least twice; first in a serum-containing medium and then, secondly, in a serum-free medium. Fragments containing living tumor cells can be selected by fluorochemistry, that is, by contacting the sedimented layer with a fluorogenic substrate such that viable tumor cells take up and

hydrolyze the substrate, and then exhibit fluorescence. Cytotoxicity assay protocols employing tumor cell aggregates prepared by the present techniques are also disclosed.

L20 ANSWER 4 OF 4 USPATFULL

ACCESSION NUMBER: 87:36077 USPATFULL
 TITLE: Inhibition of mammalian collagenolytic enzymes by tetracyclines
 INVENTOR(S): Golub, Lorne M., Smithtown, NY, United States
 McNamara, Thomas F., Port Jefferson, NY, United States
 Ramamurthy, N. S., Smithtown, NY, United States
 PATENT ASSIGNEE(S): Research Foundation of State University, Albany, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4666897		19870519
APPLICATION INFO.:	US 1983-566517		19831229 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Meyers, Albert T.		
ASSISTANT EXAMINER:	Kilcoyne, John M.		
LEGAL REPRESENTATIVE:	Behr, Omri M.		
NUMBER OF CLAIMS:	10		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 4 Drawing Page(s)		
LINE COUNT:	786		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of reducing pathologically excessive levels of activity of collagenolytic enzymes in mammals to substantially normal levels by administering 10-100% of the normal antibiotic therapeutic dose of a tetracycline is disclosed.

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=> s l18 not l19
L21          25 L18 NOT L19
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=> dup rem l21
PROCESSING COMPLETED FOR L21
L22          19 DUP REM L21 (6 DUPLICATES REMOVED)
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=> d ibib ab 1-
YOU HAVE REQUESTED DATA FROM 19 ANSWERS - CONTINUE? Y/(N):y
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L22 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
 ACCESSION NUMBER: 2001:430381 CAPLUS
 DOCUMENT NUMBER: 135:164518
 TITLE: Partial characterization of an enzyme fraction with protease activity which converts the spore peptidoglycan hydrolase (SleC) precursor to an active enzyme during germination of *Clostridium perfringens* S40 spores and analysis of a gene cluster involved in the activity
 AUTHOR(S): Shimamoto, Seiko; Moriyama, Ryuichi; Sugimoto, Kazuhiro; Miyata, Shigeru; Makino, Shio
 CORPORATE SOURCE: Department of Applied Molecular Biosciences, Graduate School of Bioagricultural Sciences, Nagoya University,
 SOURCE: Nagoya, 464-8601, Japan
 JOURNAL: Journal of Bacteriology (2001), 183(12), 3742-3751
 CODEN: JOBAAY; ISSN: 0021-9193
 PUBLISHER: American Society for Microbiology
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A spore cortex-lytic enzyme of *Clostridium perfringens* S40 which is encoded by sleC is synthesized at an early stage of population as a precursor consisting of four domains. After cleavage of an N-terminal prosequence and a C-terminal prosequence during spore maturation, inactive proenzyme is converted to active enzyme by processing of an N-terminal prosequence with germination-specific protease (GSP) during germination. The present study was undertaken to characterize GSP.
 In the presence of 3-[(3-cholamidopropyl)dimethyl-ammonio]-1-propanesulfonic acid (CHAPS), a nondenaturing detergent which was needed for the stabilization of GSP, GSP activity was extd. from germinated spores. The enzyme fraction, which was purified to 668-fold by column chromatog., contained three protein components with mol. masses of 60, 57, and 52 kDa. The protease showed optimum activity at pH 5.8 to 8.5 in the presence of 0.1% CHAPS and retained activity after heat treatment at 55.degree.C for 40 min. GSP specifically cleaved the peptide bond between Val-149 and Val-150 of SleC to generate mature enzyme. Inactivation of GSP by phenylmethylsulfonyl fluoride and HgCl2 indicated that the protease is a cysteine-dependent serine protease. Several pieces of evidence demonstrated that three protein components of the enzyme fraction are processed forms of products of cspA, cspB, and cspC, which are positioned in a tandem array just upstream of the 5' end of sleC. The amino acid sequences deduced from the nucleotide sequences of the csp genes showed significant similarity and showed a high degree of homol. with those of the catalytic domain and the oxyanion binding region of subtilisin-like serine proteases. Immunochem. studies suggested that active GSP likely is localized with major cortex-lytic enzymes on the exterior of the cortex layer in the dormant spore, a location relevant to the pursuit of a cascade of cortex hydrolytic reactions.
 REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS
 FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L22 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1999:512145 CAPLUS
 DOCUMENT NUMBER: 131:270291
 TITLE: Human macrophages synthesize type VIII collagen in vitro and in the atherosclerotic plaque
 AUTHOR(S): Weikamp, Benedikt; Cullen, Paul; Plenz, Gabriele; Robenek, Horst; Rautenberg, Jurgin
 CORPORATE SOURCE: Institut für Arterioskleroserecherche, Münster, 48149, Germany
 SOURCE: FASEB Journal (1999), 13(11), 1445-1457
 CODEN: FAJOCJ; ISSN: 0892-6638
 PUBLISHER: Federation of American Societies for Experimental Biology
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Type VIII collagen is a short-chain collagen that is present in increased amts. in atherosclerotic lesions. Although the physiol. function of this matrix protein is unclear, recent data suggest an important role in tissue remodeling. Type VIII collagen in the atherosclerotic lesion is mainly derived from smooth muscle cells. We now show that macrophages in the atherosclerotic vessel wall and monocytes in adjacent mural thrombi also express type VIII collagen. We demonstrated this using a novel combined fluorescence technique that simultaneously stains, within the same tissue section, specific RNAs by in situ hybridization and proteins by indirect immunofluorescence. In culture, human monocyte/macrophages expressed type VIII collagen at all time points from 1 h to 3 wk after isolation. Western blotting and immunopptn. also revealed secretion of type VIII collagen into the medium of 14-day-old macrophages. Because this is the first report of secretion of a collagen by macrophages, we tested the effect of lipopolysaccharide (LPS) and interferon .gamma., substances that stimulate macrophages to secrete lytic enzymes, on macrophage expression of type VIII collagen. LPS and interferon .gamma. decreased expression of type VIII collagen. By contrast, secretion of matrix metalloproteinase 1 (MMP 1) was increased, indicating a switch from a collagen-producing to a degradative phenotype. Double in situ hybridization studies of expression of type VIII collagen and MMP 1 in human coronary arteries showed that in regions important for plaque stability, the ratio of MMP 1 RNA to macrophage type VIII collagen RNA varies widely, indicating that the transition from one phenotype to the other that we obsd. in vitro may also occur in vivo.
 REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS
 FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L22 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
 (Continued)
 L22 ANSWER 3 OF 19 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. DUPLICATE 2
 ACCESSION NUMBER: 1999:66814 BIOSIS
 DOCUMENT NUMBER: PREV199900066814
 TITLE: Proteolytic activity of the *Gymnorhynchus gigas* plerocercoid: Purification and properties of a collagenase from the crude extract.
 AUTHOR(S): Vazquez-Lopez, C. (1); De Armas-Serra, C.; Gimenez-Pardo, C.; Rodriguez-Casabeiro, P.
 CORPORATE SOURCE: (1) Lab. Parasitol., Fac. Pharm., Univ. Alcala, Alcala de Henares, Ctra. Madrid-Barcelona Km. 33.600, E-Madrid 28871 Spain
 SOURCE: Parasitology Research, (Jan., 1999) Vol. 85, No. 1, pp. 64-70.
 ISSN: 0932-0113.
 DOCUMENT TYPE: Article
 LANGUAGE: English
 AB The present report demonstrates that the *Gymnorhynchus gigas* plerocercoid possesses various types of endo- and exoproteases with activity against general (azocoll, azocasein, and azoalbumin) and specific substrates (elastin, keratin, collagen, hemoglobin, fibrinogen, plasma, and immunoglobulin G). The activity against collagen is principally due to a 24-kDa collagenase with an isoelectric point of 7.5 and without isoforms or sugar residues. Moreover, its high degree of proteolytic activity against collagen under conditions similar to those encountered by the parasite in its hosts (pH and temperature) and its similarity to metallo- and cysteine proteases (the principal protease types implicated in degradation of tissues) suggests the importance of this molecule as a lytic enzyme principally implicated in penetration processes across the teleost muscle or/and into the gastrointestinal system of elasmobranch fishes as well as in molting processes.

L22 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1997:316214 CAPLUS
 DOCUMENT NUMBER: 127:46817
 TITLE: Molecular characterization of a germination-specific muramidase from *Clostridium perfringens* S40 spores and nucleotide sequence of the corresponding gene
 AUTHOR(S): Chen, Yinghua; Miyata, Shigeru; Makino, Shio; Moriyama, Ryuichi
 CORPORATE SOURCE: Dep. Applied Biol. Sci., Sch. Agric. Sci., Nagoya Univ., Nagoya-Aichi, 464-01, Japan
 SOURCE: Journal of Bacteriology (1997), 179(10), 3181-3187
 CODEN: JOBAAY; ISSN: 0021-9193
 PUBLISHER: American Society for Microbiology
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The exudate of fully germinated spores of *Clostridium perfringens* S40 in 0.15 M KCl-50 mM potassium phosphate (pH 7.) was found to contain another spore-lytic enzyme in addn. to the germination-specific amidase previously characterized (S. Miyata, R. Moriyama, N. Miyahara, and S. Makino, Microbiol. 141:2643-2650, 1995). The lytic enzyme was purified to homogeneity by anion-exchange chromatog. and shown to be a muramidase which requires divalent cations (Ca²⁺, Mg²⁺, or Mn²⁺) for its activity. The enzyme was inactivated by sulfhydryl reagents, and sodium thioglycolate reversed the inactivation by Hg²⁺. The muramidase hydrolyzed isolated spore cortical fragments from a variety of wild-type organisms but had minimal activity on decoated spores and isolated cell walls. However, the enzyme was not capable of digesting isolated cortical fragments from spores of *Bacillus subtilis* ADD1, which lacks muramic acid .delta.-lactam in its cortical peptidoglycan. This indicates that the enzyme recognizes the .delta.-lactam residue peculiar to spore peptidoglycan, suggesting an involvement of the enzyme in spore germination. Immunochem. studies indicated that the muramidase in its mature form is localized on the exterior of the cortex layer in the dormant spore. A gene encoding the muramidase, aleM, was cloned into *Escherichia coli*, and the nucleotide sequence was detd. The gene encoded a protein of 321 amino acids with a deduced mol. wt. of 36,358. The deduced amino acid sequence of the aleM gene indicated that the enzyme is produced in a mature form. It was suggested that the muramidase belongs to a sep. group within the lysozyme family typified by the fungus *Chalaropsis lysozyme*. A possible mechanism for cortex degrdn. in *C. perfringens* S40 spores is discussed.

L22 ANSWER 6 OF 19 USPATFULL
 ACCESSION NUMBER: 96:38811 USPATFULL
 TITLE: DNA fragment encoding a hydrogen peroxide-generating NADH oxidase
 INVENTOR(S): Higuchi, Masako, Neyagawa, Japan
 Mataumoto, Junichi, Moriguchi, Japan
 Yamamoto, Yoshikazu, Neyagawa, Japan
 Kamio, Yoshiyuki, Sendai, Japan
 Izaki, Kazuo, Miyagi, Japan
 PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Osaka, Japan (non-U.S. corporation)
 NUMBER KIND DATE
 PATENT INFORMATION: US 5514587 19960507
 APPLICATION INFO.: US 1994-220677 19940331 (B)
 NUMBER DATE
 PRIORITY INFORMATION: JP 1993-73989 19930331
 JP 1993-254459 19931012
 DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Wax, Robert A.
 ASSISTANT EXAMINER: Hobbs, Lisa J.
 LEGAL REPRESENTATIVE: Towns and Banta
 NUMBER OF CLAIMS: 5
 EXEMPLARY CLAIMS: 1
 LINE COUNT: 985
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB A gene encoding a hydrogen peroxide-generating NADH oxidase and a method for preparing a large amount of the NADH oxidase with the use of the gene and gene recombinant techniques are disclosed.

L22 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1997:358545 CAPLUS
 DOCUMENT NUMBER: 126:329591
 TITLE: Production and wound-healing applications of enzyme preparations obtained from lysis of *Streptomyces flavus* 197
 INVENTOR(S): Grigiskis, Saulius; Spokiene, Aldona-Ona; Baskys, Egidijus-Vladas; Vilutis, Kestutis
 PATENT ASSIGNEE(S): Grigiskis, Saulius, Lithuania; Spokiene, Aldona-Ona; Baskys, Egidijus-Vladas; Vilutis, Kestutis
 SOURCE: Lith., 7 pp.
 CODEN: LIXXFS
 DOCUMENT TYPE: Patent
 LANGUAGE: Lithuanian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
LT 3878	B	19960425	LT 1994-1868	19940202

AB Enzymes can be obtained by lysis of cells of *Streptomyces flavus* 197 (deposited at the UAB Biocenter microorganism collection under the accession no. K-91) grown in liq. culture by filtration, concn., and extn. of the dry enzyme complex with org. solvents. The enzyme prepn. obtained is a complex of lytic enzymes, in particular proteolytic peptidases, collagenases, and elastases which can be effective for lysis of some gram-pos. and gram-neg. microorganisms, including pathogens. The enzyme prepn. have medical and veterinary applications in treatment of purulent and necrotic wounds, bed sores, burns, and bullet wounds.

L22 ANSWER 7 OF 19 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
 ACCESSION NUMBER: 1996:505492 BIOSIS
 DOCUMENT NUMBER: PREV199699227848
 TITLE: Fractions from commercial collagenase preparations: Use in enzymic isolation of the islets of Langerhans from porcine pancreas.
 AUTHOR(S): Kloeck, Gerd; Kowalski, Matthias B.; Herring, Bernhard J.; Eiden, Martin E.; Weidemann, Astrid; Langer, Stefan; Zimmermann, Ulrich (1); Federlin, Konrad; Bretzel, Reinhard
 G.
 CORPORATE SOURCE: (1) Lehrstuhl Biotechnologie, Univ. Wuerzburg, Biozentrum, Am Hubland, D-97074 Wuerzburg Germany
 SOURCE: Cell Transplantation, (1996) Vol. 5, No. 5, pp. 543-551.
 ISSN: 0963-6897.
 DOCUMENT TYPE: Article
 LANGUAGE: English
 AB Transplantation of isolated islets of Langerhans is an intriguing possibility for the treatment of diabetes mellitus. The isolation of islets from pancreata requires the specific dissociation of the tissue. Commercial collagenases from *Clostridium histolyticum* are widely used for this purpose. Unfortunately, the effectiveness of these commercial enzymes is not predictable and differs considerably between suppliers and even from lot to lot. This is due mainly to differences in their specific collagenase activity and to the presence of other lytic enzymes, as well as to other contaminants. Free flow zone electrophoresis (FFZE) was used to separate the effective protein components from undesired compounds and to prepare a digestive enzyme mixture with controlled composition of lytic activities. Fractionation of crude collagenases by FFZE resulted in partially purified protein fractions that were enriched for collagenase and tryptic activities, and contained only trace amounts of neutral protease. These preparations proved to be highly effective in an in vitro assay for the liberation of viable islets from porcine pancreas. To scale up the production of these collagenases with defined enzyme composition, we fractionated two different lots of a commercial collagenase from *C. histolyticum* (one lot effective in islet isolation, the other not) by using fast protein liquid chromatography (FPLC) on hydroxypatite. Again, high efficacy of islet release from pancreatic tissue was correlated to high specific tryptic and collagenase activities and low levels of neutral protease. The chromatographic protocol developed in this study converted a non-effective collagenase lot into a preparation that allowed successful islet isolation.

L22 ANSWER 8 OF 19 CAPIUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:900763 CAPIUS

DOCUMENT NUMBER: 124:47021

TITLE: A gene (sleC) encoding a spore-cortex-lytic enzyme from *Clostridium perfringens* S40 spores; cloning, sequence analysis and molecular characterization

AUTHOR(S): Miyata, Shigeru; Moriyama, Ryuichi; Miyahara, Nobuko; Makino, Shio

CORPORATE SOURCE: School of Agricultural Sciences, Nagoya University, Aichi, 464-01, Japan

SOURCE: Microbiology (Reading, United Kingdom) (1995), 141(10), 2643-50

CODEN: MICRO; ISSN: 1350-0872

PUBLISHER: Society for General Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Antiserum was raised against a 31 kDa spore-cortex-lytic enzyme, which is released during germination of *Clostridium perfringens* S40 spores. Western blotting of dormant spore and vegetative cell fractions sepd. by SDS-PAGE indicated that the 31 kDa enzyme is spore-specific and that the enzyme in the dormant spore exists as a 36

kDa protein which has no cortex-lytic activity. A gene encoding the 31 kDa enzyme, sleC, was cloned into *Escherichia coli* using a synthetic oligonucleotide as a hybridization probe and the nucleotide sequence of the entire gene was detd. The N-terminal amino acid sequence of the 36 kDa protein was found in this reading frame, confirming that the 36 kDa protein is a pro-form of the 31 kDa enzyme. The deduced amino acid sequence indicated that the 31 kDa enzyme is produced as a precursor, comprising three portions: an N-terminal prepro-sequence (114 amino acid residues), a pro-sequence (35 amino acid residues) and a mature enzyme (289 amino acid residues). It is suggested that the 36 kDa pro-enzyme is non-covalently attached to the exterior of the cortex layer, and that the pro-form is processed to release the active enzyme during germination.

L22 ANSWER 9 OF 19 CAPIUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:366297 CAPIUS

DOCUMENT NUMBER: 122:180018

TITLE: Tracking the evolution of the bacterial choline-binding domain: molecular characterization of the *Clostridium acetobutylicum* NCIB 8052 cspA gene

AUTHOR(S): Sanchez-Beato, Ana R.; Ronda, Concepcion; Garcia, Jose

CORPORATE SOURCE: L. Consejo Superior Investigaciones Cientificas, Madrid, Spain

SOURCE: Journal of Bacteriology (1995), 177(4), 1098-103

CODEN: JOBAAJ; ISSN: 0021-9193

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The major secreted protein of *Clostridium acetobutylicum* NCIB 8052, a choline-contg. strain, is CspA (clostridial secreted protein). It

appears to be a 115,000-Mr glycoprotein that specifically recognizes the choline residues of the cell wall. Polyclonal antibodies raised against CspA detected the presence of the protein in the cell envelope and in the culture medium. The sol. CspA protein has been purified, and an oligonucleotide probe, prepd. from the detd. N-terminal sequence, has

been used to clone the cspA gene which encodes a protein with 590 amino acids and an Mr of 63,740. According to the predicted amino acid sequence,

CspA is synthesized with an N-terminal segment of 26 amino acids characteristic of prokaryotic signal peptides. Expression of the cspA gene in

Escherichia coli led to the prodn. of a major anti-CspA-labeled protein

of 80,000 Da which was purified by affinity chromatog. on DEAE-cellulose. A comparison of CspA with other proteins in the EMBL database revealed that the C-terminal half of CspA is homologous to the choline-binding domains of the major pneumococcal autolysin (LytA amidase), the pneumococcal antigen PspA, and other cell wall-lytic enzymes of pneumococcal phages. This region, which is constructed of four repeating motifs, also displays a high similarity with the glucan-binding domains

of several streptococcal glycosyltransferases and the toxins of *Clostridium difficile*.

L22 ANSWER 10 OF 19 CAPIUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:652315 CAPIUS

DOCUMENT NUMBER: 121:252315

TITLE: Correlation of proteolytic activities of organ cultured intact mouse skin with defined hair cycle stages

AUTHOR(S): Paus, Ralf; Krejci-Papa, Niels; Li, Lingna; Czarnetzki, Beate M.; Hoffman, Robert M.

CORPORATE SOURCE: Dept. Dermatology, University Hospital R. Virchow, Berlin, D-13344, Germany

SOURCE: J. Dermatol. Sci. (1994), 7(3), 202-9

CODEN: JDSCEI; ISSN: 0923-1811

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The cyclic growth activity of the hair follicle is characterized by substantial remodelling of the extracellular matrix, yet, little is known about the proteolytic activities regulating this process. In murine

skin, hair cycling is highly synchronized and is assocd. with dramatic remodelling of all skin compartments. The authors therefore assessed, in this pilot study, proteolytic activities of murine skin from various stages of the depilation-induced hair cycle. The defined proteolytic activities displayed by organ cultured intact mouse skin differed between hair cycle stages. Skin with all follicles in telogen or mid anagen displayed only minimal lysis of collagen type I gels, while early anagen skin had significant collagenase activity. Skin cultured on gelatin gels at the air-liq. interphase (histoculture) completely lysed the gel within 5 days when all follicles were in early anagen, whereas this was not obsd. with mid and very late anagen skin. Zymog. of conditioned medium from these cultures revealed the secretion of activated interstitial collagenase and of gelatinases of 72 and 92 kDa, with the max. of interstitial collagenase activity secreted by anagen IV skin. Addn. of TPA or TNF- α to the culture medium stimulated secreted collagenase type I activity. The C 57 BL-6 mouse offers an attractive model for dissecting and manipulating hair cycle-assocd. proteolysis in a physiol. relevant system.

L22 ANSWER 11 OF 19 USPATFULL

ACCESSION NUMBER: 93:46331 USPATFULL

TITLE: Device and method for the rapid qualitative and quantitative determination of the presence of a reactive ligand in a fluid

INVENTOR(S): Marchand, Joseph; Verrieres Le Buisson, France

PATENT ASSIGNEE(S): Toledano, Jacques, Paris, France
Compagnie Oris Industrie S.A., Gif-Sur-Yvette, France (non-U.S. corporation)
Cistest, Paris, France (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5217905		19930608
APPLICATION INFO.:	US 1988-220895		19880718 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	FR 1988-5668	19880428

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Saunders, David

ASSISTANT EXAMINER: Chin, Christopher L.

LEGAL REPRESENTATIVE: Browdy and Neimark

NUMBER OF CLAIMS: 20

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 4 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 804

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A device for the rapid qualitative and quantitative determination of the presence of a reactive ligand in a fluid.

This device comprises a first reaction zone in which there is an at least temporarily impermeable membrane designed to receive a sample of test fluid and to be associated with at least one labeled reagent; a second reaction zone which is bounded on the one hand by the said membrane and on the other by a second at least temporarily impermeable membrane comprising a solid phase containing a reference reagent; and a third reaction zone which contains means for developing the reaction.

A method for the rapid qualitative and quantitative determination of the presence of a reactive ligand in a fluid.

Applications to the detection of the presence, in a biological fluid, of antibodies or antigens in particular.

L22 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 4
 ACCESSION NUMBER: 1993:487507 CAPLUS
 DOCUMENT NUMBER: 119:87507
 TITLE: Sequence of the lyc gene encoding the autolytic lysozyme of *Clostridium acetobutylicum* ATCC824: comparison with other lytic enzymes
 AUTHOR(S): Croux, Christian; Garcia, Jose L.
 CORPORATE SOURCE: Cent. Invest. Biol., Cons. Super. Invest. Cientif., Madrid, 28006, Spain
 SOURCE: Gene (1991), 104(1), 25-31
 CODEN: GENED6; ISSN: 0378-1119
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The lyc gene, encoding an autolytic lysozyme from *C. acetobutylicum* ATCC824, has been cloned. The nucleotide sequence of the lyc gene has been detd. and found to encode a protein of 324 amino acids (aa) with a deduced Mr of 34,939. The lyc gene is preceded by 2 open reading frames with unknown functions, suggesting that this gene is part of an operon. Comparison between the deduced aa sequence of the lyc gene and the directly detd. N-terminal sequence of the extracellular clostridial lysozyme suggests that the enzyme is synthesized without a cleavable signal peptide. Moreover, the comparative analyses between the clostridial lysozyme and other known cell-wall lytic enzymes revealed a significant similarity with the N-terminal portion of the lysozymes of *Streptomyces globisporus*, the fungus *Chalaropsis*, the *Lactobacillus bulgaricus* bacteriophage mv1, and the *Streptomyces pneumoniae* bacteriophages of the Cp family (CpL lysozymes). In addn., the analyses showed that the C-terminal half of the clostridial lysozyme was homologous to the N-terminal domain of the muramoyl-pentapeptide-carboxypeptidase of *Streptomyces albus*, suggesting
 a role in substrate binding. The existence of 5 putative repeated motifs
 in the C-terminal region of the autolytic lysozyme suggests that this region could play a role in the recognition of the polymeric substrate.

L22 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1983:486054 CAPLUS
 DOCUMENT NUMBER: 99:86054
 TITLE: Changes of the activity of lytic enzymes in alveolar bone incident to orthodontic tooth movement
 AUTHOR(S): Kamei, Teruaki
 CORPORATE SOURCE: Dep. Orthod., Kanagawa Dent. Coll., Yokosuka, Japan
 SOURCE: Kanagawa Shigaku (1983), 17(4), 514-24
 CODEN: KSHQDM
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 AB Helical torsion spring which exerted about 50g expanding force was attached to the maxillary incisors of rabbits. After 1, 2, 4, 7, 14, or 21 days of tooth movement, the animals were sacrificed and the alveolar bones assayed for 6 enzymes. Owing to the helical torsion spring, the right and left upper incisors sepd. rapidly, and tooth movement continued.
 The orthodontic tooth movement differed according to 3 stages. Following the initial tooth displacement, many enzyme activities were elevated
 above the control level, which suggested that metabolic changes in the alveolar bone cells were induced by orthodontic stimulation (first stage). Cathepsin D and collagenase activities increased after tooth movement and reached their peak levels at days 2-4 (second stage), but afterwards they gradually decreased. Acid phosphatase and cathepsin B activities gradually increased following orthodontic tooth movement until days 7-14 (second stage). Alk. phosphatase and hyaluronidase activities rapidly increased on the 2nd day after tooth movement, and continued to increase to day 21 (third stage). Apparently, resorption of alveolar bone shifted to bone formation at day 7 of orthodontic tooth movement, and after that time an active bone remodeling took place.

L22 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5
 ACCESSION NUMBER: 1986:49379 CAPLUS
 DOCUMENT NUMBER: 104:49379
 TITLE: Invasion potential of human choriocarcinoma cell lines and the role of lytic enzymes
 AUTHOR(S): Sekiya, S.; Oosaki, T.; Suzuki, N.; Takamizawa, H.
 CORPORATE SOURCE: Sch. Med., Chiba Univ., Chiba, 280, Japan
 SOURCE: Gynecol. Oncol. (1985), 22(3), 324-33
 CODEN: GYNOA3; ISSN: 0090-8258
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The chick chorioallantoic membrane (CAM) was used as an assay system to examine the invasive potential of human choriocarcinoma cell lines. When 5 times, 106 cells were inoculated into the CAM at the 10th day of postfertilization, 3 of 8 cell lines formed extensively invasive tumors within the CAM. The tumorigenic potential of cell lines in hamster cheek pouches was correlated with their invasive potential in the CAM. The invasive capacity of cell lines correlated well with the amt. of collagenase but did not correlate with the amt. of plasminogen activator or cathepsin B secreted by them.

L22 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1979:52082 CAPLUS
 DOCUMENT NUMBER: 90:52082
 TITLE: A histochemical study about the influence of lytic enzymes on plasma membrane enzyme activities in rat liver and kidney
 AUTHOR(S): Hardonk, M. J.; Meskendorp-Haarsma, T. J.; Koudstaal, J.
 CORPORATE SOURCE: Dep. Pathol., Univ. Groningen, Groningen, Neth.
 SOURCE: Histochemistry (1978), 58(3), 177-81
 CODEN: HCHYAL; ISSN: 0301-5564
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The effect of lipolytic, glycolytic, and proteolytic enzymes on the activities of plasma membrane enzyme activities in rat liver and kidney was investigated by a pretreatment of tissue sections with the lytic enzymes. The action of proteolytic enzymes causes a very strong decrease of leucyl-beta-naphthylamidase activity, whereas the activities of ATPase, 5'-nucleotidase, and alk. phosphatase show a lesser degree. This indicates a different membrane anchorage of leucyl-beta-naphthylamidase as compared to that of the phosphatases. Treatment with glycolytic enzymes results in a decrease of 5'-nucleotidase and ATPase activity, whereas liver alk. phosphatase and leucyl-beta-naphthylamidase show an increase in activity. Treatment with phospholipase C gives about the same results. The very strong decrease of 5'-nucleotidase activity indicates a great dependence on phospholipids.

L22 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1978:102967 CAPLUS
 DOCUMENT NUMBER: 88:102967
 TITLE: Proliferative synovitis in hemophilia. Biochemical and morphologic observations
 AUTHOR(S): Mainardi, Carlo L.; Levine, Peter H.; Werb, Zena; Harris, Edward D., Jr.
 CORPORATE SOURCE: Dep. Med., Dartmouth-Hitchcock Med. Cent., Hanover, N. H., USA
 SOURCE: Arthritis Rheum. (1978), 21(1), 137-44
 CODEN: ARHEAM; ISSN: 0004-3591
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The synovium removed from the knee of a 10-yr-old with hemophilia A was characterized morphol. and biochem. The specimen showed villous hypertrophy with hyperplasia of synovial lining cells which contained abundant intracytoplasmic granules of hemosiderin. Monolayer cultures prep'd. from enzymically dispersed tissue were characterized by pigment-laden fibroblast-like cells and round cells. Both explants of synovium and adherent cells secreted a large amt. of latent collagenase and neutral proteinase into the culture medium. The secretion of these enzymes dropped sharply and intracellular pigment decreased with passage of these cultures. Lysozyme was secreted by the explants but was not detected in the monolayer culture medium. These data establish the degradative potential of the synovitis found in hemophilia and support the concept that recurrent hemoarthrosis without inflammation is sufficient in and of itself to produce synovitis.

L22 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1976:144611 CAPLUS
 DOCUMENT NUMBER: 84:144611
 TITLE: Inhibition of plasmin-mediated fibrinolysis by vitamin E
 AUTHOR(S): Moroz, L. A.; Gilmore, N. J.
 CORPORATE SOURCE: McGill Univ. Clin., R. Victoria Hosp., Montreal, Que., Can.
 SOURCE: Nature (London) (1976), 259(5540), 235-7
 CODEN: NATUAS
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB In vitro fibrinolysis mediated by plasmin [9001-90-5], but not by other lytic enzymes, e.g. collagenase [9001-12-1], was inhibited by vitamin E [1406-18-4] or D-alpha-tocopheryl succinate [4345-03-3]. 50% inhibition occurring at an inhibitor:enzyme molar ratio of approx.100:1. The pertinence of these data to physiol. and pathol. phenomena, and to vitamin E therapy is discussed.

L22 ANSWER 17 OF 19 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 1976:179611 BIOSIS
 DOCUMENT NUMBER: BA62:9611
 TITLE: MOLECULAR FORMS OF ACETYL CHOLIN ESTERASE FROM TORPEDO-CALIFORNICA THEIR RELATIONSHIP TO SYNAPTIC MEMBRANES.
 AUTHOR(S): LNEBUGA-MUKASA J S; LAPPI S; TAYLOR P
 SOURCE: BIOCHEMISTRY, (1976) 15 (7), 1425-1434.
 CODEN: BICHAM. ISSN: 0006-2960.
 FILE SEGMENT: BA; OLD
 LANGUAGE: Unavailable
 AB The 16S and 8S forms of acetylcholinesterase (AChE), which are composed of an elongated tail structure in addition to the more globular catalytic subunits, were extracted and purified from membranes from T. californica electric organs. Their subunit compositions and quaternary structures were compared with 11S lytic enzyme which is derived from collagenase or trypsin treatment of the membranes and devoid of the tail unit. Upon sodium dodecyl sulfate-polyacrylamide gel electrophoresis in the absence of reducing agent, appreciable populations of monomeric through tetrameric species were observed for the 11S form. Under the same conditions the 16S form yielded only monomer and dimer in addition to a higher molecular weight species. If complete reduction was effected, only the 80,000 molecular weight monomer was dominant for both the 11S and 16S forms. Cross-linking of the 11S form by dimethyl suberimide followed by reduction yielded monomer through tetramer in descending frequency, while the 16S form again showed a high molecular weight species. A comparison of the composition of the 11S and 16S forms revealed that the latter had an increased glycine content, and 1.1 and 0.3 mol % hydroxyproline and hydroxylysine, respectively. Collagenases that were purified to homogeneity and were devoid of amidase and caseinolytic activity, but active against native collagen, converted 16S acetylcholinesterase to the 11S form. Composition and substrate behavior of the 16S enzyme were indicative of the tail unit containing a collagen-like sequence. A membrane fraction enriched in AChE and components of basement membrane were separated from the major portion of the membrane protein. The 16S but not the 11S form reassociated selectively with this membrane fraction. There are distinct similarities between the tail unit of AChE and basement membrane components, and there may be a primary association of AChE with the basement membrane.

L22 ANSWER 19 OF 19 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 1976:34318 BIOSIS
 DOCUMENT NUMBER: BR12:34318
 TITLE: TRYPAN BLUE INHIBITION OF LYTIC ENZYME ACTIVITY DURING NEWT LIMB REGENERATION.
 AUTHOR(S): DEARLOVE G E; DRESDEN M H
 SOURCE: J. Cell Biol., (1975) 67 (2 PART 2), 87A.
 CODEN: JCLBA3. ISSN: 0021-9525.
 DOCUMENT TYPE: Conference
 FILE SEGMENT: BR; OLD
 LANGUAGE: Unavailable